4527

Form 501

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: SE Alaska

11--5613

DESCRIPTIVE REPORT.

Hyd *Sheet No:* 4527

LOCALITY:

Chichagof I. ~W. Coast

Dry Pass to Lisianski Str.

1925

CHIEF OF PARTY:

A.M. Sobieralski

4527

WWB

(11)

June 10, 1926.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4527

Locality: S. E. ALASKA

Chief of Party: A. M. Sobieralski in 1925.

Plane of reference is MLLW.
12.3 ft. on tide staff at Kimshan Cove.

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

G Rude

Chief, Division of Tides and Currents.

Descriptive Report to accompany sheet #2

Limits and extents.

The hydrogaphy coverd by this sheet extends from a line extending west true from Cape Dearborn for a distance of 3 naut. miles to Pt. Urey, including Dry Pass, Little Bay, Bertha Bay, Porcupine Bay, Porcupine Harbor, Ilin Bay and the channels between the numerous islands, Porcupine and Skinner Islands.

Outlying dangers and islands.

1. 18 ft. rocky bottom, breaks in heavy weather, marked by kelp in the Spring, 1/2 miles(naut) 296° true from ⊙ Bill.
2. 23 ft. rocky bottom, 1mi.(naut) 305° true from ⊙ Bill.
3. 17 ft. rocky bottom, breaks in heavy weather, marked by kelp in Spring, 0.7 mi.(naut) 216° true from ⊙ Cor
4. Sunken rock that breaks always, 0.7 mi. (naut) 210° true from ⊙ Cor
5. Rocks awash at low water, 0.35 mi.(naut) 219° true from ⊙ Cor. This is surrounded by kelp for a distance of 200 meters off. The surrounding depths west and south of this rock for a distance of 200 meters are 29 ft. and 23 ft.
6. Sunken rock, breaks in heavy weather, 0.7 mi.(naut) 213° true from △Ore.
7. Rock bares 5ft. at low water, 0.6 mi.(naut) 221° true from△ Ore.
8. Two rocks close together awash at high water, 0.45 mi. (naut) 204° true from △ Ore.
9. 11 ft. rocky bottom 0.45 mi.(naut) 177° true from ⊙ Cor. Marked by kelp and breaks with a moderate sea.
10. Rock awash at low water 0.43 mi. (naut) 262° true from△Ore.
11. Sunken rock, 1 mi.(naut) 265° true from△Ore. This rock breaks in heavy weather.
12. Sunken rock, 1.3 mi.(naut) 267° true from △ Ore. This rock breaks in heavy weather.
12a 12 ft. ----- 1.1 mi.(naut) 271° true from △ Ore.
13. Sunken rock, 0.5 mi.(naut) 223° true from △ Pine. Breaks in heavy swell.
14. 17 ft. rocky bottom, 3/4 mi.(naut) 289° true from △Ore. This spot is marked by kelp in the spring.
15. 29 ft. rocky bottom, 0.5 mi.(naut) 115° true from △ Pine. This spot is marked by kelp in the spring.
16. 26 ft. rocky bottom, 0.4 mi.(naut) 110° true from △ Pine. Marked by kelp in the spring.
17. Rock awash at low water, 0.42 mi.(naut) 330° true from △ Ore.
18. 25 ft. rocky, marked by kelp, breaks in moderate weather, 0.32 mi.(naut) 319° true from △ Ore.
19. 3 ft. rocky, marked by kelp, breaks in moderate weather, 0.62 mi.(naut) 341° true from △ Ore.
20. 34 ft. rocky, marked by kelp, breaks in heavy sea, 0.38 mi.(naut) 257° true from ⊙ Fur.
21. 6 ft. rocky, 0.68 mi. (naut) 268° true from ⊙ Fur.
22. 6 ft. rocky, 0.35 mi.(naut) 83° true from △ Porc.
23. 13 ft. rocky, 330 meters, 305° true from △Porc.
24. Rock awash at low water, 0.52 mi. (naut) 34° true from △ Porc.
25. Rock awash at low water, 0.55 mi.(naut) 27° true from △Porc.
26. Reef awash at high water, 0.7 mi.(naut) 29° true from △ Porc.
27. Rock bares 3 ft. at 1/2 tide. 0.6 mi.(naut) 354° true from △Porc.
28. Sunken rock, 0.45 mi.(naut) 223° true from ⊙ Tri.
29. Sunken rock, 0.2 mi.(naut), 180° true from ⊙ Cor.

Por

Tri

20 on smooth sheet

30. Rock awash at high water, 110 meters 155° true from ⊙ Tri.
31. Sunken rock, 440 meters, 147° true from △Urey. Marked by kelp.
32. There are numerous rocks awash at high water, 488 meters 245° true from ⊙ Tri.
33. 14 ft rocky, marked by kelp, ~~416~~ 214 meters, 344° true from ⊙ Tri.
34. 2 ft. rocky, marked by kelp, 268 meters 67° true from ⊙ Tri.
35. 14 ft. rocky, marked by kelp, 591 meters 98° true from ⊙ Tri.
36. 13 ft. rocky, marked by kelp, 605 meters 112° true from ⊙ Tri.
37. 19 ft. rocky, marked by kelp, 930 meters, 105° true from ⊙ Tri.
38. 21 ft. rocky, marked by kelp, 1110 meters, 107° true from ⊙ Tri.

In Porcupine Harbor

39. Sunken Rock, 148 meters, 274° true from ⊙ Ped.
40. Sunken rock, 135 meters, 142° true from ⊙ Ped.
41. Rocks bare at high water, 100 meters north of ⊙ Reg.
42. Sunken rock and breaker, 335 meters 321° true from ⊙ Wint. The area from this rock, 90° true to shore breaks in moderate weather.
43. Rocks bare at high water. 400 meters 21° true from ⊙ Peg.
44. There are numerous rocks awash at high water in th e small bay off ⊙ Fur.
45. There are numerous rocks off White Sulpher Springs in Bertha Bay.
46. Breaker, 238 meters, 175° ⊙ Snag.
47. Rocks, bare at high water, 464 meters, 155° true from ⊙ Cor.

Rmarks:

The plane of reference for reducers is MLLW. Kimshan Cove tides were used except when gauge there was not in operation, at which time Sitka tides were used. Plane of reference of Kimshan was 12.3 ft.; of Sitka, 9.8 ft.

Beginnings and endings of lines are entered in sounding records, in degrees true and statute miles. All bearings to rocks and breakers are recorded in sounding records. Are magnetic unless otherwise noted.

Respectfully submitted

Augustus P Ratti

Augustus P Ratti
Jr. H. & G. Engineer

STATISTICS SHEET # 2

Date 1925	Letter	Volume	Positions	Soundings	Miles Statute Sounding Lines	Miles Statute to Working Grounds	Miles Statute from Working Grounds	Launch
August 22	a	1	19	63	6.4	10.0	12.0	62
24	b	1	90	170	21.3	12.0	12.0	
25	c	1	75	172	18.0	12.0	12.0	
31	d	1	13	17	2.0	2.5	8.0	
September 3	e	1	88	173	17.0	9.0	9.0	
4	f	2	86	159	19.8	8.0	7.0	
10	g	2	98	217	20.0	4.5	8.0	
11	h	2	144	256	26.0	4.5	8.0	
12	i	2	42	67	5.6	6.0		
12	i	3	33	84	7.0		2.5	
14	j	3	55	130	12.5	6.0	6.0	
15	k	3	87	181	16.7	7.0	12.0	
16	l	3	111	225	23.0	7.0	8.0	
17	m	3	19	31	2.9	12.0		
17	m	4	84	147	12.5		10.0	
24	n	4	82	117	12.0	7.0	4.4	
25	o	4	105	183	19.2	9.0	1.0	
28	p	4	69	118	7.2	0.0		
			1300	2510	249.1	118.5	119.9	

Total Area Covered 26.75 Sq. Mi. (Statute Miles)

October 1	A	1	72	72	11.4	4.5	4.0	Cosmos
2	B	1	1	1	0.0	4.0	4.0	"
9	C	1	68	b68	11.2	10.0	4.0	"
10	D	1	17	17	2.8	4.0	12.0	"
			158	158	25.4	22.5	24.0	

Section of Field Records.

Report on sheet no. 4527-Hyd.
Surveyed in 1925
Chief of Party - A. M. Sotieralski
Surveyed by - Field Party
Protracted by -
Soundings Plotted by -
Verified and inked by - H. E. MacEwen

1. The records conform to the requirements of the general instructions.
2. The plan and character of the development fulfil the requirement of the general instructions
3. The plan and extent of development satisfy the specific instructions.
4. No system of sounding line crossings was used but when crossings occur the depths check.
5. From the 10 fathom curve offshore the depth curves can be completely drawn.
6. The field plotting was completed to the extent prescribed in the general instructions
7. The office draftsman did not have to do any part of the drafting done by the field party.
8. The junctions with adjacent sheets are adequate.

Report on H-4527

9. The area within the limits of this sheet is well covered by the survey. However there are many sunken rocks and awash rocks that are not sufficiently developed.

10. Remarks:

The field draftsman in plotting the soundings inclined toward making the figures (soundings and position numbers) too large.

Inconsistency was noted in the plotting of fractional soundings. Many changes were necessary. In a few instances depths were plotted incorrectly.

In the descriptive report is a complete list of dangers within the limits of the sheet

11. Rating of work

(a) Character and scope of surveying: Excellent

(b) Field drafting: Good.

Respectfully submitted

H. S. MacEwen

Draftsman

Reviewed by.

date -

E.R.

ADDRESS THE DIRECTOR
U.S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DHM

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON October 29, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4527

West Coast Chichagof Island, Southeast Alaska

Surveyed in 1925

Instructions dated February 4, 1925 (SURVEYOR)

Chief of Party, A. M. Sobieralski.

Surveyed by A. P. Ratti.

Protracted by E. H. Kirsch.

Soundings plotted by A. F. Jankowski.

Verified and inked by H. E. MacEwen.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of the survey conform to the requirements of the General Instructions.

3. The plan and extent of development satisfy the requirements of the specific instructions except that all indications of dangers were not developed.

4. No cross lines were run and the bottom is too irregular to permit of a comparison of adjacent lines.

5. The information is sufficient for drawing the usual depth curves except close inshore and in some of the bays and harbors.

6. The field plotting was completed to the extent prescribed in the General Instructions and was fairly well executed. The penciled soundings were too large and fractional soundings were incorrectly plotted. The protracting was well done.

7. The junction with H. 4001 is generally adequate as far as overlap is concerned. Variations in depth are noted, but this is not surprising in an area marked by so broken a bottom.

In connection with these two sheets it is desired to call attention to two points that are worthy of observation. In Lat. 57° 46' 330 m., Long. 136° 19' 140 m. a dangerous shoal was discovered with 11 feet over it in an area that had been previously sounded (1917) with 150 meter lines without the slightest indication of such shoal. Furthermore, on a previous day (D day) on the present survey a line of soundings was run across the shoal and 16 fathoms obtained at the shoalest part. This shows what might be expected in localities of this nature and to what dangers the navigator is exposed. A check line should be run across this shoal.

The second point worthy of note is the need for following up indications of shoals. In 1917 a survey party obtained a 51 ft. sounding in Lat. 57° 45' 920 m., Long. 136° 19' 890 m., surrounded by depths of 70 to 135 ft. In 1925, 18 ft. was found on the same spot.

The junction with H. 4529 is satisfactory.
The junction with H. 4002 is adequate.
The junction with H. 4524 will be taken up in the review for that sheet.

8. This survey can hardly be considered complete. If it is to be used as a basis for wire drag work, then the area is well covered. But if it is to stand as a complete hydrographic survey, then it is far from adequate. There is hardly a square mile on the sheet that does not show some indication of a lurking danger. No attempt will be made here to point out the numerous places where additional development is imperative. It is suggested, however, that whenever further work is contemplated, this sheet be carefully scanned for indications of dangers and areas insufficiently surveyed.

It is doubtful whether it is more economical in a locality of this character to follow the system adopted on this survey, rather than the immediate examination of all indications of dangers even at the expense of area covered, as directed by the General Instructions.

9. Attention is called to the fact that the sailing directions as given in the Coast Pilot for entering Ilin Bay from the westward falls close to several undeveloped indications of dangers. These are as follows:

a. A 5-fathom sounding in Lat. 57° 48' 80 m., Long. 136° 26' 640 m.

b. A 9-fathom sounding in Lat. 57° 48' 260 m., Long. 136° 25' 630 m.

c. A 9-fathom sounding about 400 meters to the eastward of the above sounding.

10. Ilin Bay and entrance, as well as the entrance to Porcupine Harbor, need additional work.

11. It is strongly recommended that if commercial considerations warrant it, this entire area be wire dragged, as it is very evident from a mere physical inspection of this sheet that until this is done no absolute assurance as to freedom of uncharted dangers will be possible in this locality.

12. The sunken rock charted in Lat. 57° 45 1/2', Long. 136° 20', just west of an 8 fathom spot, should be removed as it is doubtless identical with the 3 fathom spot found in the place of the charted 8 fathoms.

13. Special mention should be made of the completeness of the sounding records as regards details, such as rocks, breakers, kelp, etc. In this respect the recording of E. H. Kirsch, Junior Engineer, who was also taking the left angle, was excellent.

14. Character and scope of field operations and field drafting - good.

15. Reviewed by A. L. Shalowitz, October, 1926.

Special attention is called to the following:

1. On page 13 of the Supplement (dated June 7, 1926) to the Alaska Coast Pilot, Part I, under the paragraph "Outlying Dangers", the following corrections should be made:

a. The 4 1/2 fathom shoal 1/2 mile 310° true from Cape Dearborn should be changed to 3 fathoms.

b. The 4 1/2 fathom shoal 1.2 miles 310° true from Cape Dearborn should be changed to 3 5/6 fathoms.

c. The 4 fathom shoal 1 mile 330° true from the Cape should be changed to 2 5/6 fathoms.

These changes are necessitated by an oversight of the field party in submitting coast pilot notes based on soundings unreduced for tide.

2. The 3 fathom sounding under (a) was apparently intended to be covered by a 17 ft. drag strip, but a careful plotting of the drag work in the office shows that the shoal was entirely missed by the drag.

3. In the Descriptive Report submitted with this sheet, under the list marked "Outlying dangers and islands" the following discrepancies were found:

a. No. 14 of the list gives a 17 ft. rocky bottom 3/4 mile 289° true from △ Ore. The smooth plotting shows 20 ft. as the least water found and no authority could be found for the 17.

b. The rocks and reef noted under Nos. 24, 25, 26 and 27 of the list are located from △ Poro. An inspection of the boat sheet, smooth sheet and topographic sheets reveals no such rocks in this locality. It is evident that △ Por was intended.

c. The sunken rock noted under No. 29 of the list as being 0.2 mile 180° true from ⊙ Cor is doubtless intended for the rock shown on the smooth sheet 0.2 mile 180° from ⊙ Tri. None of the sources of information show a rock fitting this description near ⊙ Cor, and it is fairly safe to assume that no such rock exists.

See "Note" on sheet

Approved —

A. L. Giacomini

L. O. Colbert

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

4527

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. (2) 4527

State . . S. E. Alaska. . . . . .

General locality . ~~West Coast of Chichagof Island~~ W. Coast . . . . .

Locality . Dry Pass to Lisianski Strait ~~North of Cape Dearborn~~ . . . . . .

Chief of party . A. M. Sebieralski. . . . . .

Surveyed by . A. P. Ratti . . . . . .

Date of survey . . Season 1925 . . . . . .

Scale . . 1-10,000 . . . . . .

Soundings in . . Fathoms . . . . . .

Plane of reference M. L. L. W. . . . . .

Protracted by E. H. Kirsch Soundings in pencil by A. F. Jankowski

Inked by . . . . . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. ✓ report, ... Tide books, ... Marigrams, 1 Boat sheet ✓,

5 Sounding books ✓, ... Wire-drag books, ... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks:

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

4527

HYDROGRAPHIC TITLE SHEET

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U. S. Coast and Geodetic Survey.

Register No. 4527

State S.E.Alaska.

General locality . ~~West Coast~~ Chichagof Island. W. Coast

Locality Dry Pass to Lisianski Strait ~~north of Cape Dearborn~~

Chief of party . . A.M.Soberalski, Com'd'g, Str. Surveyor .

Surveyed by Augustus P.Batti, Jr. H.and.G.E.

Date of survey Aug. 22 to Sept. 28, 1925.

Scale 1-10000.

Soundings in . Fathoms

Plane of reference . MLLW

Protracted by . A.P.R. Boat sheet . Soundings in pencil by A.P.R. Boat sheet

Inked by . . . . . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. report, ... Tide books, ... Marigrams, 1 Boat sheets,

5 Sounding books, 1 Wire-drag books, ... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks: